

Mammals of the Coastal Forests near Bega New South Wales

II. Annotated Checklist

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INTRODUCTION

The checklist arose from a mammal survey (Lunney and Barker 1986a) conducted as part of a five-year study of the effects of logging on the fauna of the State Forests near Bega, on the south coast of New South Wales. The study area, which was described in a survey of the reptiles and amphibians of the area (Lunney and Barker 1986b), comprised Mumbulla State Forest 9089 ha), Mimosa Rocks National Park and its extension westwards along Nelson Creek into the former Tanja State Forest, and adjacent farmland. A description of the forests, the logging regime they were subject to, and the occurrence of fire and drought in the forests, are given in Lunney and Barker (1986a).

Some mammal species are dealt with in separate studies: possums and gliders (Lunney 1987), bats (Lunney et al. 1985; Lunney and Barker 1986c), small mammals (Lunney et al. 1986, 1987; Lunney and Ashby 1987), and the impact on native mammals of land-use changes and exotic species since settlement (Lunney and Leary 1988). The terms "common", "uncommon" and "rare" apply to the status of the species within the study area. "TSI" refers to Timber Stand Improvement, a forestry practice whereby non-commercial trees are eliminated.

Two points from part I, Survey (Lunney and Barker 1986a), need correction. Firstly, a typographical error in Table 1 incorrectly places the status of three species (*Antechinus swainsonii*, *Sminthopsis leucopus* and *Petaurodes volans*) as common. They were uncommon. Secondly, the number of carnivore scats was 2248, not 2249, of which 2233 were those of dogs and foxes, one was from a *Dasyurus maculatus*, the remainder from *Felis catus* and *Sus scrofa*.

MONOTREMATA

Echidna *Tachyglossus aculeatus*

Common. Foraging animals, and to a lesser extent, droppings and diggings, were recorded throughout the area. Remains were also found in Dog and Fox scats. Echidnas were seen only in late spring and summer and as individuals.

MARSUPIALIA

Family Dasyuridae

Spotted-tailed Quoll *Dasyurus maculatus*

Rare. The evidence for the presence of this species was a characteristic *Dasyurus* scat (Triggs 1984) which contained grooming hairs identified by both B. Triggs and H. Brunner. This scat was found in November 1981 in the eastern edge of Mumbulla State Forest in an area of intensely burnt regrowth after a TSI operation carried out in 1971. This was the most disturbed of all forest habitats.

Brown Antechinus *Antechinus stuartii*

Common. This species was present in all areas before and after logging, although the fire sharply reduced the numbers and the drought delayed recovery of the population. Hair was found in Dog and Fox scats, and skeletal remains were found in pellets of both Sooty Owl *Tyto tenebricosa* and Barn Owl *T. alba* (Smith 1984). Trapping in unlogged, unburnt forest in 1979 (i.e. pre-drought) determined a birth date of 24 August for one female, and on the basis of pouch condition, all other females were to give birth within a few days.

Dusky Antechinus *Antechinus swainsonii*

Uncommon. This species was trapped in low numbers in both logged and unlogged habitats prior to the fire. It was more common in regrowth forest in the 1-2 year and 10-15 year (TSI) age classes. After the fire none was recorded until one was trapped on a survey line in regenerating gully in June 1983, and another on a survey line in December 1984.

White-footed Dunnart *Sminthopsis leucopus*

Uncommon. One of the interesting finds of the study was the largest population (99 individuals from June 1980 to December 1984) of this species so far recorded. Furthermore, it preferred living on logged, burnt ridges and midslopes and avoided gullies. It was also caught along the edges of freshly made or regraded forest roads and tracks. The greatest numbers were found in the year following the fire in Mumbulla State Forest. Except for an individual in June 1980 caught in a logged coupe along Mountain Road towards the eastern end of Mumbulla State Forest, all other *S. leucopus* were caught in the centre part of this forest within an area of 500 ha. None was caught in the TSI forest (10-15 year regrowth forest) along the southern and western parts of Mumbulla State Forest, and none was caught in other localities, particularly Tanja State Forest, despite specific trapping for this species. While adults were readily caught in Elliott traps, juveniles were more easily captured in pitfall traps. Fur of *S. leucopus* was also found in five Dog and Fox scats in Mumbulla State Forest. Remains were also found in owl pellets (Smith 1984).

In December of 1981, 1983 and 1984 nests of juveniles were found during searches for reptiles (Lunney and Barker 1986b). In 1981 a juvenile male weighing 10 g was found in a shallow depression under a sheet of bark of Silvertop Ash *Eucalyptus sieberi* stripped during logging operations and left by the edge of a roadside near a logged ridge. The day-nest consisted of a few leaves among several blades of grass, and it was barely distinguishable from the surrounding ground. This nest was discovered at 1300 hours and when the bark was lifted the animal did not flee but remained and was photographed, weighed, toe-clipped and returned to its nest. Checks on its position were made hourly, then more frequently towards dusk. At 2000 hours (dusk), the animal fled when the bark was overturned. This observation suggests that *S. leucopus* is a nocturnal species.

In December 1983, two day-nests were discovered. An individual was found under a 10 cm diameter log on a ridge that had been logged in 1979 and burnt in 1980. It fled as soon as the log was lifted. It was judged to be a juvenile from its size. Two juvenile females, each weighing 9 g, were found huddled together in a second nest under a 15 cm diameter rotting log on a ridge near the edge of the road. In December 1984, a nest containing a juvenile female weighing 8 g was found under a strip of Yellow Stringybark *E. muellerana* bark on the roadside within 100 m of the December 1981 nest site. All nest sites were similar to the first. The finding of four nests, all on ridges in disturbed sites, is consistent with findings on the habitat preferences of this species (Lunney *et al.* 1987; Lunney and Ashby, 1987).

In June 1980 a male and a female were placed in an enclosure on the day of their capture for observation. They rapidly detected, killed and ate the live arthropod prey

offered, but only slowly found the dead prey placed in the observation box. The prey species consumed were a range of spiders, cockroaches, moths and beetles, but the millipedes were ignored. A large female huntsman spider *Delina cancerides* (family Sparassidae), in its defence posture, was attacked cautiously. The *S. leucopus* charged the spider and bit off a leg, withdrew, ate the leg, and repeated the sequence until the spider was rendered defenceless. The *S. leucopus* then ate the spider. Eating was characteristically done by the *S. leucopus* holding the dead prey in its forepaws and passing the prey into the side of its mouth. Unseen, was the killing and devouring during the first night of the male *S. leucopus* by the similar-sized female. All that remained of the male was part of the skull, a thin strip of skin connecting this to part of the tail, the lower part of the back legs, and an intact scrotum.

Family Peramelidae

Long-nosed Bandicoot *Perameles nasuta*

Uncommon. This species was seen, heard and readily caught only in the small patches of coastal heaths of Mimosa Rocks National Park. Only three were trapped in the forest (two being caught in Elliott traps and one in a cage trap), indicating that they are rare in forest habitats. Hairs were frequently recorded in Dog and Fox scats through the area, and it was the fourth most common prey item.

Southern Brown Bandicoot *Isoodon obesulus*

Rare. The evidence for the presence of this species was hair from the only scat of a *Dasyurus maculatus*. The hair was identified by H. Brunner and B. Triggs who cautioned that since the hair was damaged, its identification was not certain, and the possibility exists that the hair was from *Perameles nasuta*. It is worthy of note that the rare *D. maculatus* was taking the rare *I. obesulus* as prey.

Family Vombatidae

Common Wombat *Vombatus ursinus*

Common. On the basis of sign identification, principally dung, wombats were considered to be common, rather than rare as indicated by sightings.

Only one individual was seen during the course of the study, near fresh burrows along Knights Creek in Mumbulla State Forest. Although burrows were not common, a few showed evidence of use. By contrast, wombat dung was found throughout most of the forest including the dense regrowth on the ridges logged 10-12 years previously, but rare in the just logged, burnt forest. Hairs were found in 53 Dog and Fox scats.

Family Petauridae

Common Ringtail Possum *Pseudocheirus peregrinus*

Uncommon. Spotlight searches indicated that it was rare. It was seen only in the deeper unlogged gullies. The

analysis of Dog and Fox scats, however, showed that it was more common since remains were found in 72 scats. Dreys or nests were observed in dense TSI regrowth in the unburnt western part of Mumbulla State Forest. Skeletal remains were found in three of 10 Sooty Owl pellets (Smith 1984). Also one drey was seen in the 10-year TSI in the eastern part of the Mumbulla State Forest in June 1982, two years and seven months after it had been burnt. In December 1984 one drey was seen in shrub regrowth in a coupe logged in 1979 and burnt in 1980. Since all habitats in Mumbulla State Forest had been searched intensively from 1979 to 1984 for other groups of animals, the low number of dreys in all but the thick, 15-18 year-old unburnt TSI was taken as an indication of a notable selection for this age of regrowth forest. Braithwaite (1983) recorded only one *P. peregrinus* out of 99 possums and gliders seen by logging crews during operations in Mumbulla and Tanja State Forests. This supports our finding that *P. peregrinus* occurred predominantly in dense gully midstorey vegetation, in trees such as Black She-oak *Casuarina littoralis* or in regrowth TSI forest, none of which was logged during the woodchipping operations.

Greater Glider *Petauroides volans*

Uncommon. Greater Gliders were seen on only 26 occasions, usually in tall trees, along the deepest gullies. Braithwaite (1983) did not record *P. volans* in these forests, a fact which reflects both their rarity and preference for trees in unlogged gullies. Only four Dog and Fox scats contained fur of this species. One *P. volans* was recorded by logging crews as it was dislodged from a felled tree in a coupe in the western half of Mumbulla State Forest.

Yellow-bellied Glider *Petaurus australis*

Uncommon. Yellow-bellied Gliders were both seen and heard throughout most of the area, with the greatest density found in the moist gullies. They did not occur in the eastern edge of Mumbulla State Forest, nor in the adjacent area of Mimosa Rocks National Park, areas which were characterized by smaller trees. Hairs were detected in 29 Dog and Fox scats, and the remains of one specimen was found under the roost of a Powerful Owl *Ninox strenua* in Tanja State Forest. Populations in the area were highly mobile and were briefly seen and heard in areas when eucalypt flowering was prolific. Characteristic Yellow-bellied Glider excisions on trees (Coastal Grey Box *E. bosistoana*, Spotted Gum *E. maculata* and Monkey Gum *E. cypellocarpa*) were also seen, but the incidence of these scratches was not high. R. Shaw (Forestry Commission Foreman) also commented that *P. australis* regularly occurred in *E. maculata* forest along the lower reaches of Nelson Creek in Tanja State Forest during the logging operations in late 1976 and early 1977. *P. australis* was seen in groups of up to six individuals. They were conspicuous by their calls, by their sequences of

long glides (frequently each glide was 50-100 m in a line across a logged coupe) and by their congregation on flowering eucalypts, particularly the profuse flowering of *E. bosistoana* in January 1981.

Sugar Glider *Petaurus breviceps*

Common. This species was seen and heard in all areas of the forest, in a wide range of tree species and tree sizes, and was the commonest and most widespread of all the possum-glider species. They were commonly heard calling and were occasionally caught in the winters of 1980 and 1981 in Elliott traps on the ground. None was caught in other seasons, despite extensive trapping at these times. Hairs were also found in 15 Dog and Fox scats. During 10 days of observation during logging in July 1979 in the centre of Mumbulla State Forest, only one nest of *P. breviceps* was seen. It was dislodged from a large stringybark as it was felled, and contained six individuals.

Family Phalangeridae

Common Brushtail Possum *Trichosurus vulpecula*

Uncommon. Twenty-six sightings were made in the area, and hair was present in 102 Dog and Fox scats. During a 10-day observation period of logging in July 1979, one *T. vulpecula* was dislodged from its nest of grass and bark in a hollow within a large *E. cypellocarpa* in Mumbulla State Forest. Forestry Commission Foreman J. Milliner commented that some *T. vulpecula* had been disturbed during the felling of the trees in the eastern part of the forest.

Family Burramyidae

Eastern Pygmy Possum *Cercartetus nanus*

Rare. Only two individuals of this species were recorded. One was found dead in January 1982 about 500 m to the east of Mumbulla State Forest on the road to Mimosa Rocks National Park. The other was caught in a pitfall trap in Mumbulla State Forest in December 1984. Hair was found in four scats.

Feathertail Glider *Acrobates pygmaeus*

Rare. This species was only seen on five occasions, four of which were in the western portion of Tanja State Forest. Hair was found in only four scats.

Family Potoroidae

Long-nosed Potoroo *Potorous tridactylus*

Rare. Potoroos were neither seen nor trapped during the study. Evidence for their presence comes solely from hair in 11 scats. Rose (1981) trapped one animal and found remains in a Fox den near Bermagui about 10 km to the north. The species was caught at Cobargo 25 km northwest of the study area in the late 1960s (Johnston and Sharman 1976).



Fig. 1. A Red-necked Wallaby *Macropus rufogriseus* in farmland near Mumbulla State Forest. Farms supported a much less diverse mammal fauna than forested land.



Fig. 2. Three individuals of the Golden-tipped Bat *Phoniscus papuensis*, one of Australia's rarest mammals, were found in Mumbulla State Forest during the survey. Such discoveries demonstrate the importance of fauna surveys in determining the natural values of an area.

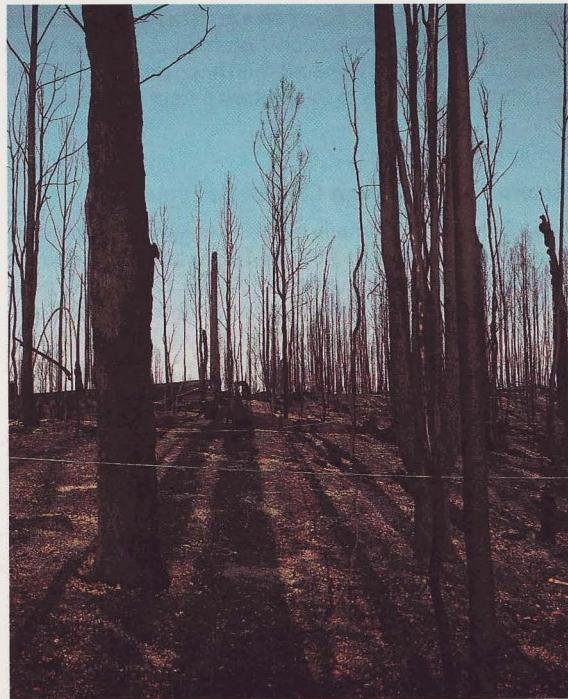


Fig. 3. Ten-year-old TSI (Timber Stand Improvement) ridge forest in Mumbulla State Forest three weeks after an intense fire in November 1980. The combined impact of logging and fire simplified the forest habitat and reduced the diversity of its dependent mammal fauna.



Fig. 4. Young in the marsupium of the Brown Antechinus *Antechinus stuartii*. Although logging did not significantly affect this species, the fire drastically reduced the population size and the drought from 1980 to 1983 delayed the recovery of the population.

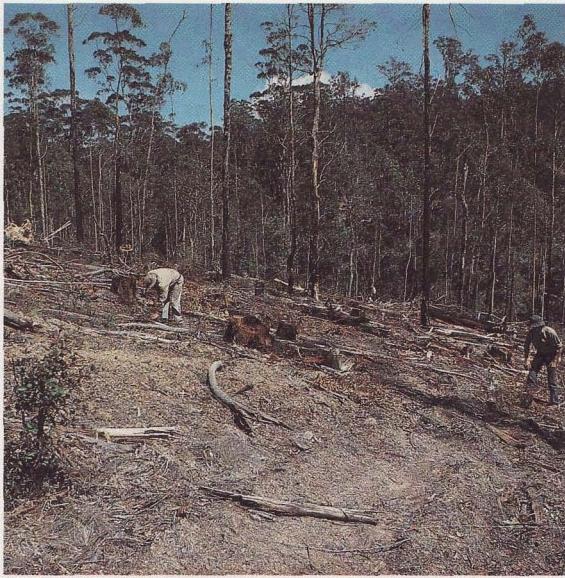


Fig. 5. A north-west facing ridge of a just-logged coupe in Mumbulla State Forest showing the contrast between logging for woodchips and sawlogs and the adjacent unlogged coupe in the background. Photo taken in October 1980, just before the fire.

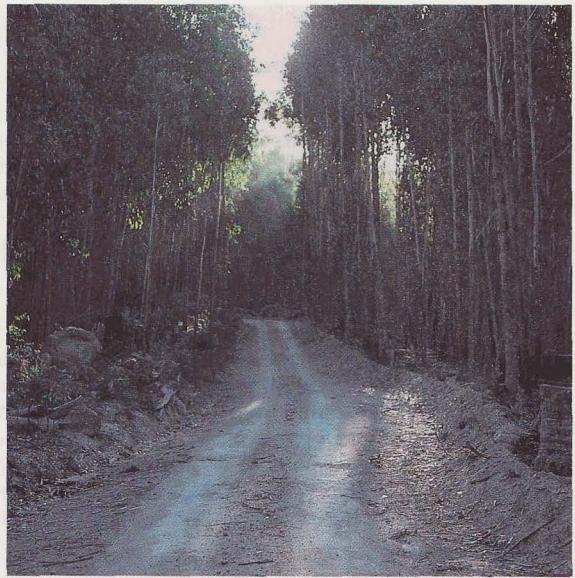


Fig. 6. Fourteen-year-old TSI (Timber Stand Improvement) ridge forest in Mumbulla State Forest. Note the large old stump and the high density of small trees, principally Silver-top Ash *Eucalyptus sieberi*. Uniform forest regrowth, such as shown here, was found to be poor habitat for many mammals, such as bats and gliders, which are dependent upon large old trees with hollows in their limbs and trunks.

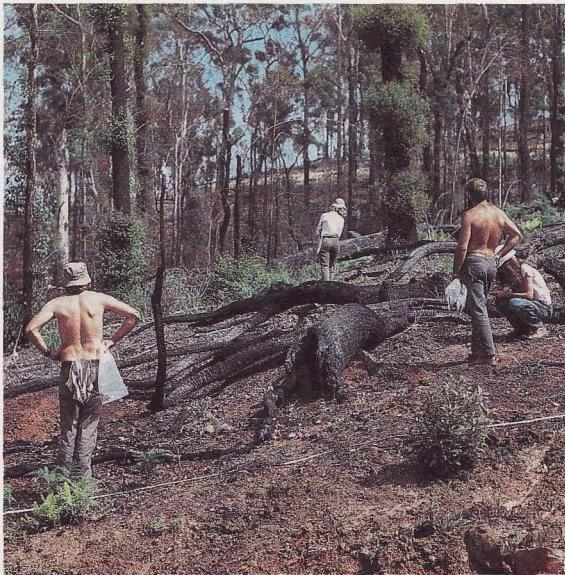


Fig. 7. Fire, which is a common natural hazard of the forests of south-eastern Australia, compounds the impact of logging on the fauna. The site shown here being surveyed in March 1981 was logged in June 1980, and burnt in November 1980 with an intensity that burnt or scorched the forest canopy. This logged-burnt habitat was suitable for breeding by the White-footed Dunnart *Sminthopsis leucopus*. The Dusky Antechinus *Antechinus swainsonii* was eliminated from all the burnt forest.

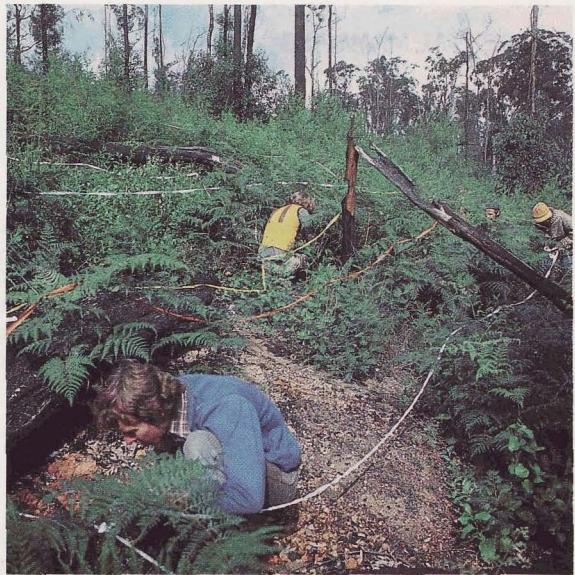


Fig. 8. Estimates of the numbers and distribution of the large ground-dwelling species of forest herbivores were made by hand collecting and counting their dung, as shown here. Collections were made in quadrats of $50 \text{ m} \times 10 \text{ m}$ laid out in the major forest habitats, such as this gully in Mumbulla State Forest logged for woodchips and sawlogs in mid-1979, burnt in November 1980, and shown here photographed in April 1982.

Photography by Daniel Lunney

Family Macropodidae

Red-necked Wallaby *Macropus rufogriseus*

Common. Red-necked Wallabies were observed throughout the study area, but were shy and bounded off at the slightest disturbance. Their dung was common and hair was found in 216 Dog and Fox scats. They were most commonly seen along road edges in the intensely burnt TSI forest, and at dusk in farmland adjacent to the forest.

Eastern Grey Kangaroo *Macropus giganteus*

Uncommon. Grey Kangaroos were seen on only six occasions. The first sighting was in June 1980, the last in December 1983. Four were by the edges of forest roads, one was in a gully, and a group of six was seen on a ridge on a newly made forest road (Back River Road) leading across Mumbulla Creek. The sightings ranged throughout Mumbulla State Forest, and no animals were seen on farmland.

Swamp Wallaby *Wallabia bicolor*

Common. This species was the macropod most commonly encountered during the study. They were sighted along all roads through the forest, particularly in areas of regeneration, and also feeding at dusk in cleared farmland adjacent to the forest. Their dung was also the most common macropod dung in the forest. Animals were occasionally seen dead on roads and hairs of this species were the most common found in Dog and Fox scats.

PLACENTAL MAMMALS

Native

Family Pteropidae

Grey-headed Flying-fox *Pteropus poliocephalus*

Rare. Hair of *P. poliocephalus* was found in four Dog and Fox scats in the study area. This species was seen only once when a small temporary camp of about 1000 individuals was located in a deep gully in Bermagui State Forest in April 1984. Even in this secluded spot, shooting had occurred as evidenced by dead animals on the ground.

Family Rhinolophidae

Eastern Horseshoe-bat *Rhinolophus megaphyllus*

Common. *R. megaphyllus*, an obligate cave dweller, was seen in low numbers roosting in two gold mine shafts abandoned in the 1930s, one in Tanja West State Forest and one in Mumbulla State Forest. Infrequent captures were made in harp traps up to 3 km from either mine shaft, indicating that this species foraged over a large area.

Family Mollosidae

White-striped Mastiff-Bat *Tadarida australis*

Common. Only one *T. australis* was trapped, but this species, which forages above the tree canopy (Richards 1983), was regularly recorded over a wide area by the low-frequency component of its echo-locating call, which is audible to the human ear.

Little Northern Mastiff-Bat *Mormopterus loriae*

Rare. Two individuals were caught in harp traps in the forest, one of which was in the TSI. These captures represent the extreme southern limit of its range (Allison 1983). On the basis of morphometrics these two individuals were assigned to this species by H. Parnaby rather than to the similar *M. norfolkensis*.

Family Vespertilionidae

Gould's Long-eared Bat *Nyctophilus gouldi*

Common. Four hundred and forty individuals were caught, making it the most common bat of this survey. *N. gouldi* was trapped or netted in all parts of the forest. Although roosts were found mainly in the hollows of large trees in unlogged gullies, some roosted under the flaking bark of dead wattles. Numbers declined markedly during the drought.

Lesser Long-eared Bat *Nyctophilus geoffroyi*

Common. Two hundred and six individuals were trapped or netted throughout the forest in the same localities as *N. gouldi*. Like *N. gouldi*, it was present throughout the study period, showing a capacity to survive in these forests despite impacts of logging, fire and drought.

Common Bent-wing Bat *Miniopterus schreibersii*

Common. *M. schreibersii* utilized the same two mineshafts as *R. megaphyllus*. It numbered several thousand individuals in summer, but was infrequently caught. A few individuals were found in sea caves on the coast.

Gould's Wattled Bat *Chalinolobus gouldii*

Uncommon. Although only 33 individuals were caught during the study, they were present in all forest habitats.

Chocolate Wattled Bat *Chalinolobus morio*

Common. During the study 86 individuals were caught. This species flew up to 5 km at dusk between very large mature trees, in which it roosted, and the sites in the logged burnt forest where it was caught (Lunney et al. 1985). A maternity roost in a very large Yellow Stringybark

E. muellerana was discovered during logging operations. A hollow limb contained *C. morio* females with young and breeding *Nycticeius orion* females.

Large-footed Mouse-eared Bat *Myotis adversus*

Rare. Only one individual was captured, in a harp trap next to a small pool behind the foredune at Aragunnu in Mimosa Rocks National Park.

Greater Broad-nosed Bat *Nycticeius rueppellii*

Uncommon. Only 34 *N. rueppellii* were caught during the study. This was the only species with a highly skewed sex ratio (31 males, 3 females). Captures were made in all habitats in both traps and nets. Individuals caught in traps often devoured *Eptesicus vulturinus* caught at the same time.

Little Broad-nosed Bat *Nycticeius orion*

Rare. This species was caught in only two habitats within the area.

Golden-tipped Bat *Phoniscus papuensis*

Rare. The collection of three specimens of this rare and unusual bat extended its known range by 1000 km (Lunney and Barker 1986c).

Great Pipistrelle *Pipistrellus tasmaniensis*

Uncommon. Parnaby (1983) suggested that *P. tasmaniensis* is a migratory species. Our data support this view as 28 of the 35 animals caught were taken in May 1982.

Little Forest Eptesicus *Eptesicus vulturinus*

Common. Four hundred and nine individuals were caught, making it the second most common bat species in the area. Many individuals were recaptured a number of times, making *E. vulturinus* the most frequently caught bat during the study. They were captured in all areas of the forest and used habitual flyways for several successive years.

King River Eptesicus *Eptesicus regulus*

Rare. Only two individuals were captured (and identified by D. Woodside); one over a creek in the coastal Mimosa Rocks National Park and one in regenerating TSI forest.

Large Forest Eptesicus *Eptesicus sagittula*

Rare. Only 11 individuals of *E. sagittula* were captured, although over a wide area of Mumbulla State Forest. This species was caught only in harp traps.

Family Muridae

Water Rat *Hydromys chrysogaster*

Rare. The evidence for the presence of this species came from the stomach of a Diamond Python *Morelia spilotes* which contained an intact individual (Lunney and Barker 1986b), and from hair remains in four Dog and Fox scats. All records were from the coastal strip of Mimosa Rocks National Park.

Bush Rat *Rattus fuscipes*

Common. *R. fuscipes* was trapped in all areas of the forest, the highest densities occurring in unlogged forest with dense ground cover. Numbers were lower in logged and burnt areas, particularly when both occurred together. That only 45 Dog and Fox scats contained hair of this species indicates that it was not a common prey item.

Swamp Rat *Rattus lutreolus*

Rare. Although 17 Dog and Fox scats contained hair of *R. lutreolus* only one individual was trapped. It was an adult male trapped in January 1982 in a grassy part of a coupe regenerating from logging in 1979 and the fire in 1980. It was presumed to be an individual dispersing during the latter phase of the breeding season (Lunney 1978) and thus it was presumed to have moved at least two km west from grassy habitat to the site of capture. This species is not regarded as a forest animal, but as a species of the grassy, swamp areas near the coastal lagoons, heaths, creek and river edges in what is now farmland (Lunney 1978, 1983).

EXOTIC MAMMALS

Black Rat *Rattus rattus*

Rare. Only three individuals were caught, all in June 1983 in logged forest.

House Mouse *Mus musculus*

Common. House Mice were rarely caught prior to the fire of November 1980. Plague numbers occurred 16-20 months post-fire during a brief break in the drought, and while *M. musculus* was most abundant in heavily burnt areas, it remained rare in adjacent unburnt forest.

Rabbit *Oryctolagus cuniculus*

Common. Rabbits were always abundant on farms on the fringe of the forest and in the coastal strip but did not penetrate the forest until after the fire. Of the 2233 Dog and Fox scats, 17.5% contained rabbit. Its dung, particularly along roadsides in regrowth forest, provided evidence of its movement into disturbed forest.

Brown Hare *Lepus capensis*

Rare. Hares were never seen, but five Dog and Fox scats contained hair of this species, which provided the only evidence of its presence in the area.

Cat *Felis catus*

Common. Although only two Cats were seen in the forest, they were seen regularly on farms adjacent to forests, but not along the coastal strip of Mimosa Rocks National Park. Their secretive habits, particularly in burying faeces, minimized detection. The stomach of one Cat from the forest contained the remains of a Water Skink *Sphenomorphus tympanum* and a Scaly Thrush *Zoothera dauma*.

Dog *Canis familiaris*

Common. Newsome and Corbett (1985) found that the majority of canids in the south-east of New South Wales were feral Dogs rather than Dingoes or Dingo crosses. Our observations agree with this finding. Except for one dingo-like individual seen in August 1980, all Dogs sighted were domestic breeds often roaming in packs of up to six individuals. The collection of 1240 Dog scats indicates a large number of Dogs regularly working the entire area. Analysis of the scats showed that they contained remains of a wide range of native mammals, particularly wallabies.

Fox *Vulpes vulpes*

Common. With only one exception, Foxes were sighted on farms, or in forest near farms. However, Fox scats were collected from roads throughout the forest demonstrating the presence of a larger, more widespread population than was determined by observation. Like *Canis familiaris*, this species preyed extensively on native animals. Two forest workers reported that they had seen a fox pull down and kill a "black wallaby" (*W. bicolor*) near Cobargo. This suggests that foxes were preying on the two wallaby species, and were not simply scavengers.

Cattle *Bos taurus*

Common. Cattle roamed through the eastern and southern areas of Mumbulla State Forest throughout the study period, particularly during the drought. In logged, burnt forest, and in the TSI, it was presumed they were foraging on the new growth.

Sheep *Ovis aries*

Uncommon. Only seen in the forest in 1984 along tracks in regenerating TSI forest within 1 km of farmland. All other individuals were on farms.

Goat *Capra hircus*

Never seen in the forest, but a few individuals were seen on farms adjacent to forested land.

Pig *Sus scrofa*

Rare. The dung of one individual was found on a forest road in a regenerating TSI area within 1 km of farmland, and seven scats of Dogs and Foxes contained Pig hair. None was seen in the forest, and they were not kept on adjacent farms.

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CONCHOLOGY PROGRAMME February till July 1987

The Section meets every third Saturday of the month in the Society's Rooms at Taronga Zoo.

In February, Jules LeRoi will talk about shells from Vancouver and Phukett Islands, the two islands he visited while overseas last year. While on Vancouver Island he also visited Berkley Marine Station, where Western Canada's Universities carry out their field work.

Ron Moylan, in April, will talk about diving and shelling in the Solomons. After telling members last year how different species of Nautilus are caught, by baiting traps and suspending these at an appropriate depth in the sea, listeners are bound to be intrigued by the many adventures Ron will be able to recall from his Solomons days.

Joyce Woodhouse, having been several times to Cove, will talk in May about this fascinating area, its molluscs, people and other items of interest.

For many, many years, Miss Thornley has regularly given learned talks about different mollusc families and in March she will oblige again by discussing the colourful, mainly sand-dwelling family of mitres.

Finally, last but not least, in June, Bernice Beechey will organise members to give 3-minute talks about their favourite shell or family. In the past these afternoons have been entertaining and educational and have been enjoyed by most members.

As is the case with all Conchology Section meetings, visitors are welcome and any visitor who would like to contribute to any of the meetings in any way will be encouraged.

Jules LeRoi, Secretary